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(54) Title: MULTI DIRECTIONAL MECHANICAL SCANNING IN AN ION IMPLANTER

(57) Abstract: An end station for an ion implanter has a vacuum chamber which receives an ion beam. The wafer holder is mounted at the distal end of a scanning arm which has its proximal end attached to the chamber wall. The scanning arm has at least two rotary joints providing articulation of the arm to permit movement of the wafer holder in two orthogonal scan directions in a scan plane transverse to the beam path through the vacuum chamber. A scanning arm driver moves the substrate holder in the scan plane in a desired two-dimensional scan pattern relative to the beam path.